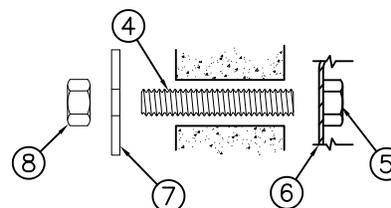


REFERENCE DRAWINGS	
AIR-CONTROL VALVE CONNECTIONS	9905-006-001
FOUNTAIN FIXTURE TRIM	9957-060-001
-SW SLEEVE/ -MT TEMPLATE	9925-173-001
OPTIONAL VALVES:	
-MVC1 S/T TIME-TROL	9900-001-004
-EVS S/T MASTER-TROL	9905-330-004

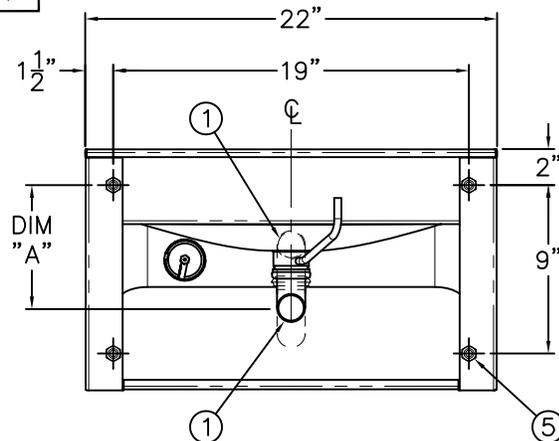
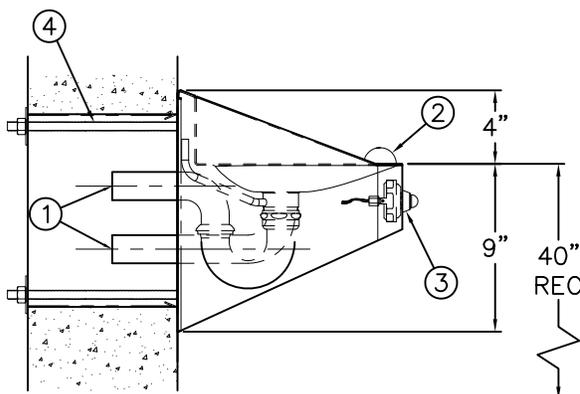


MOUNTING DETAIL

WARNING:

WATER FLOW PRESSURE 25/100 PSI MIN/MAX.
RECOMMENDED OUTLET TEMPERATURE 105°F MAX. FLUSH ALL SUPPLY LINES THOROUGHLY BEFORE CONNECTING. DRAIN VALVE PRIOR TO FREEZING TEMPERATURES.

WASTE OUTLET	DIM "A"
STANDARD	6-1/2"
-PT OPTION	3-1/4"

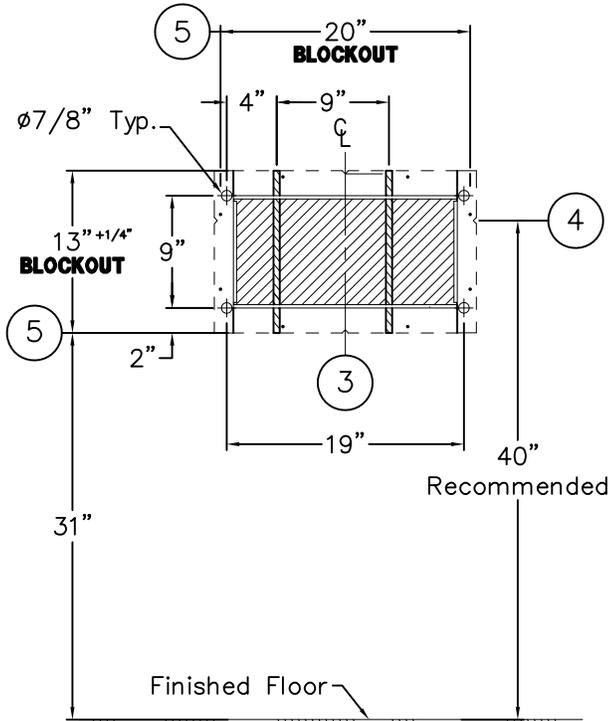


INSTALLATION INSTRUCTIONS:

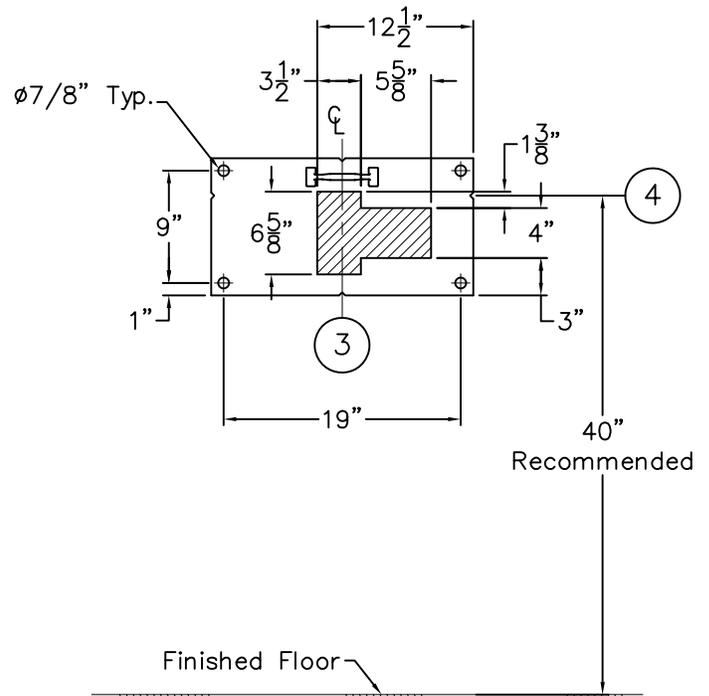
- A- ROUGH-IN FOR FIXTURE WASTE OUTLET: 1-1/2" O.D. PLAIN END ① PROVIDED. SEE DIM "A" ABOVE
- B- PRIOR TO INSTALLATION OF FIXTURE, MOUNT BUBBLER ② AND PUSHBUTTON ③ .
- C- THREAD 1/2" X 13 UNC STUDS ④ INTO ANCHOR TAPPINGS ⑤ AT REAR OF FIXTURE HAVING A MINIMUM OF 1/2" ENGAGEMENT.
- D- PLACE FOUNTAIN ⑥ UP AGAINST THE WALL, SLIDING STUDS ④ THROUGH SLEEVE OR WALL OPENINGS.

- E- FROM CHASE SIDE, TIGHTEN WASHERS ⑦ AND NUTS ⑧ ON STUDS ④ TO 60 FT/LBS.
- F- MAKE-UP FOUNTAIN WASTE CONNECTION WASTE OUTLET SUITABLE FOR A COMPRESSION CONNECTION.
- G- MOUNT THE AIR-CONTROL VALVE ASSEMBLY ⑨ . LOCATE AS REQUIRED. MAX ALLOWABLE DISTANCE BETWEEN PUSHBUTTON AND AIR-CONTROL SERVOMOTOR IS 10 FEET. WALL FASTENERS BY OTHERS.

ACORN ENGINEERING COMPANY P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200	TITLE LIGATURE-RESISTANT DRINKING FOUNTAIN, LR1670		
	MANUFACTURE DATE JULY 2017 TO PRESENT	DATE ISSUED 07/10/17	DRAWING NUMBER 9925-172-001



WALL SLEEVE (-SW)



METAL TEMPLATE (-MT)

BOTH VIEWS ARE FROM CELL SIDE

SHADED AREAS ARE REQUIRED WALL OPENINGS



INSTALLATION INSTRUCTIONS

WALL SLEEVE (-SW)

SLEEVES ARE INSTALLED IN FORMS (USING NAIL HOLES ① PROVIDED) OR GROUTED INTO BLOCK WALLS, BECOMING A PERMANENT PART OF WALL.

- A. INSTALL SLEEVE WITH FLANGE ② ON CHASE SIDE OF WALL.
- B. LOCATE TOP AND BOTTOM NOTCHES AT VERTICAL CENTERLINE ③ OF PLUMBING FIXTURE.
- C. LOCATE SIDE NOTCHES ④ AT DIMENSION SHOWN, MEASURED FROM THE FINISHED FLOOR ON CELL (FIXTURE) SIDE.

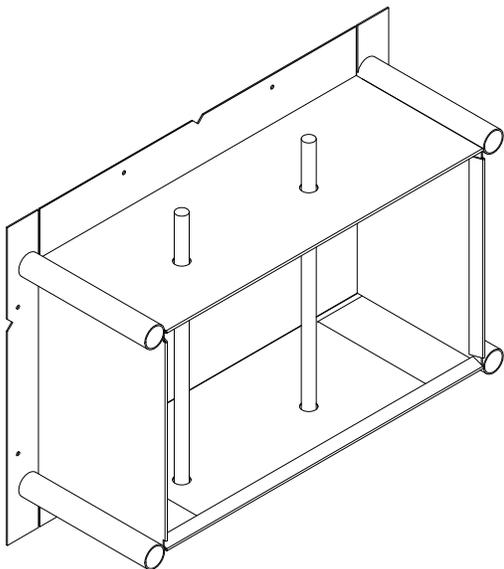
NOTES:

- 1. FOR POURED WALL CONSTRUCTION, TEMPORARY BRACING SHOULD BE INSTALLED WITHIN SLEEVE OPENING TO PREVENT DEFORMATION TO SLEEVE WHICH MAY OCCUR DURING POUR. DO NOT POUR CONCRETE DIRECTLY ON TOP OF WALL SLEEVE.
- 2. WHEN SLEEVES ARE NOT AVAILABLE BLOCKOUT FOR SLEEVE OPENING IN WALL PER DIMENSIONS SHOWN ⑤.

METAL TEMPLATE (-MT)

TEMPLATES ARE USED TO LAYOUT REQUIRED WALL OPENINGS FOR SUBSEQUENT FLAME CUTTING OR CORE DRILLING.

- A. STRIKE A HORIZONTAL CHALKLINE ④ ON THE WALL AT DIMENSION SHOWN, MEASURED FROM THE FINISHED FLOOR ON CELL (FIXTURE) SIDE. THIS WILL LOCATE CENTERLINE FOR HORIZONTAL NOTCHES ON TEMPLATE.
- B. STRIKE A VERTICAL CHALKLINE ③ ON THE WALL TO INDICATE CENTERLINE OF FIXTURE. THIS WILL LOCATE CENTERLINE FOR VERTICAL NOTCHES ON TEMPLATE.
- C. PLACE TEMPLATE AGAINST WALL. LOCATE NOTCHES ALONG CHALKLINES. MARK WALL FOR REQUIRED OPENING.



WALL SLEEVE (-SW)



ACORN ENGINEERING COMPANY
P.O. BOX 3527 Industry, CA 91744
15125 Proctor Ave Industry, CA 91746
(626) 336-4561 FAX (626) 961-2200

TITLE **LIGATURE-RESISTANT -SW WALL SLEEVE & -MT METAL TEMPLATE, LR1670**

MANUFACTURE DATE

**JULY 2017
TO PRESENT**

DATE ISSUED

07/11/17

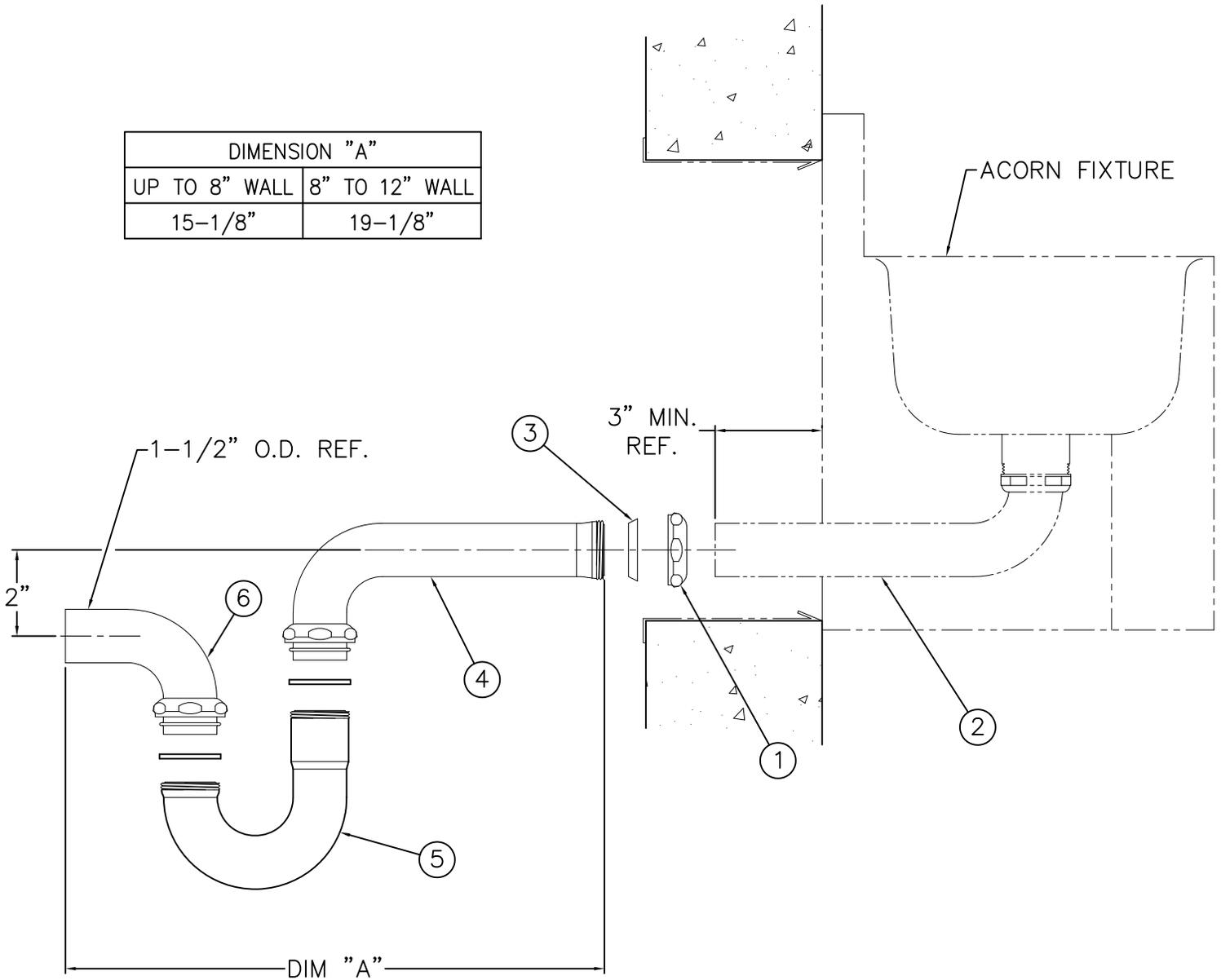
DATE REVISED

DRAWING NUMBER

9925-173-001



DIMENSION "A"	
UP TO 8" WALL	8" TO 12" WALL
15-1/8"	19-1/8"



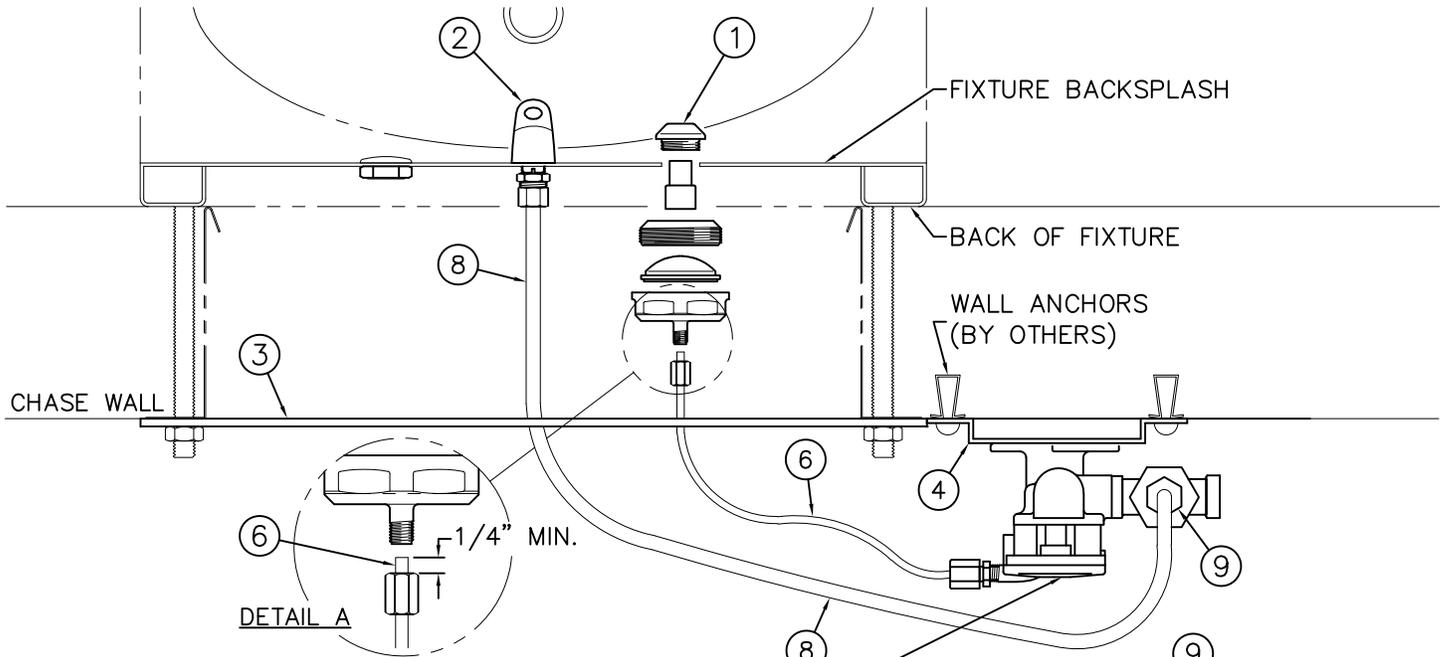
INSTALLATION INSTRUCTIONS:

A- AFTER INSTALLING ACORN UNIT ON FINISHED WALL, SLIP COMPRESSION NUT ① OVER 1-1/2" O.D. PLAIN END WASTE ②. USING COMPRESSION GASKET ③, AND NUT ① MAKE-UP COMPRESSION CONNECTION WITH SLIP JOINT ELBOW ④.

B- REMOVABLE TUBULAR P-TRAP ⑤ CONNECTS TO SLIP JOINT ELBOW ④ AND PLAIN END ELBOW ⑥ WITH COMPRESSION CONNECTIONS AS SHOWN.

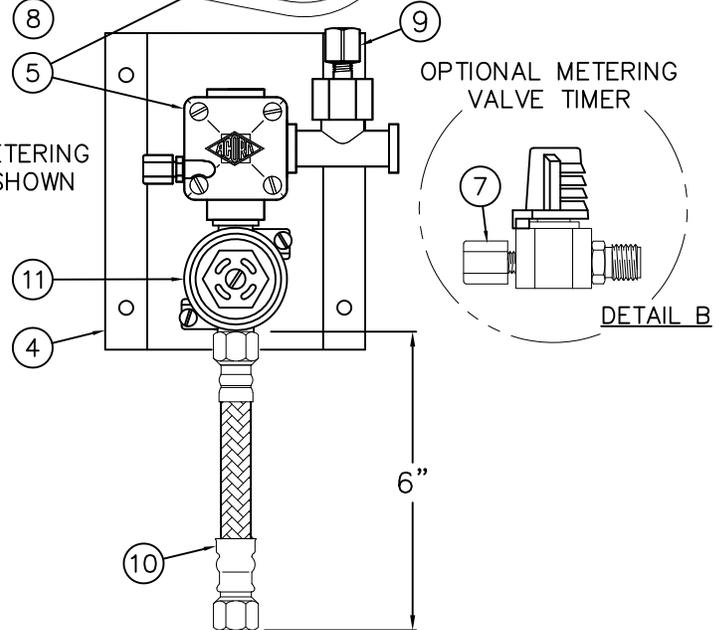
NOTE: TUBULAR P-TRAP IS REMOVABLE IN ORDER TO ALLOW FOR WASTE CLEANOUT.

<p>ACORN ENGINEERING COMPANY P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200</p>	<p>TITLE LAVATORY THRU-WALL WASTE CONNECTION w/ P-TRAP & CLEANOUT CAT. # -LW1</p>	
	<p>MANUFACTURE DATE APRIL 30, 1998 TO PRESENT</p>	<p>DATE ISSUED 3/19/98</p> <p>DATE REVISED 4/23/98</p>



REFERENCE DRAWINGS	
ASSEMBLIES	NUMBER
VALVE BODY	9955-006-003
CHECKSTOP	9956-040-003
FIXTURE TRIM	9957-051-001
AIR-CONTROL SERVOMOTERS	
METERING	9955-000-003
NON-METERING	9955-001-003

NOTE: NON-METERING VALVE SHOWN



INSTALLATION INSTRUCTIONS:

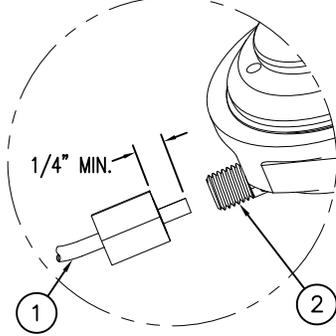
- A- PRIOR TO INSTALLATION OF THE FIXTURE, MOUNT PUSHBUTTON ① AND BUBBLER ② TO THE BACKSPASH.
- B- INSTALL THE PLUMBING FIXTURE TO THE WALL INCLUDING UPPER SUPPORT PLATE ③.
- C- LOCATE AS REQUIRED AND MOUNT THE AIR-CONTROL VALVE ASSEMBLY ④. MAXIMUM ALLOWABLE DISTANCE BETWEEN PUSHBUTTON ① AND AIR-CONTROL SERVOMOTOR ⑤ IS 10 FEET. WALL ANCHORING HARDWARE ARE BY OTHERS.
- D- CONNECT 1/8" O.D. POLYETHYLENE AIR LINE ⑥ TO PUSHBUTTON ① AND SERVOMOTOR ⑤. HAND TIGHTEN USING FERRULE NUT PROVIDED. SEE DETAIL A. NOTE: WHEN METERING VALVE IS SPECIFIED, AIR LINE CONNECTS DIRECTLY TO VALVE TIMER ⑦. SEE DETAIL B.
- E- CONNECT 1/4" O.D. POLYETHYLENE WATER LINE ⑧ TO BUBBLER ② AND COMPRESSION NUT ⑨. HAND TIGHTEN USING FERRULE NUT PROVIDED.

- F- AFTER THOROUGHLY FLUSHING THE SUPPLY LINE, MAKE-UP 1/2" NPS FEMALE SUPPLY CONNECTION. NOTE: SUPPLY INLET CONNECTION WILL ACCOMODATE 1/2" NPT MALE ADAPTER. THREAD FLEX CONNECTOR HOSE ⑩ TO CHECKSTOP ⑪ AND SUPPLY STUB OUT.
- G- SEE APPROPRIATE SERVOMOTOR REFERENCE DRAWING FOR DETAILS AND TIMING INSTRUCTIONS.

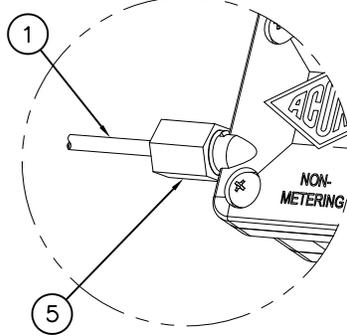
NOTE:
 MAXIMUM RECOMMENDED WORKING WATER PRESSURE IS 100 PSI; TEMPERATURE IS 130° F; OUTLET TEMPERATURE IS RECOMMENDED AT A MAXIMUM OF 105° F.
 WARNING:
 PRIOR TO MAKING INSTALLATION, SUPPLY LINES MUST BE FLUSHED OF ALL FOREIGN MATERIAL SUCH AS PIPE DOPE, CHIPS, SOLDER, ETC. VALVE MUST BE DRAINED PRIOR TO BEING SUBJECTED TO FREEZING TEMPERATURES. MAXIMUM RECOMMENDED OUTLET WATER TEMPERATURE IS 105° F.

ACORN ENGINEERING COMPANY P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200	TITLE (-03 SERIES) SINGLE TEMP AIR-CONTROL VALVE ASSEMBLY -NEW STYLE		
	MANUFACTURE DATE SEPTEMBER 1995 TO PRESENT	DATE ISSUED 11/01/95	DRAWING NUMBER 9905-001-003
	DATE REVISED 07/15/10		

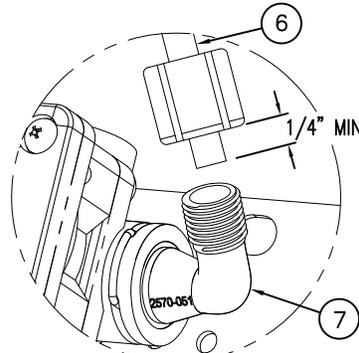
SIDE OUTLET SHOWN



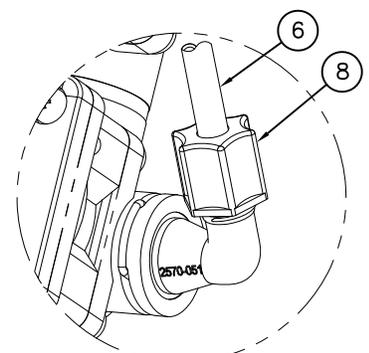
DETAIL "A"



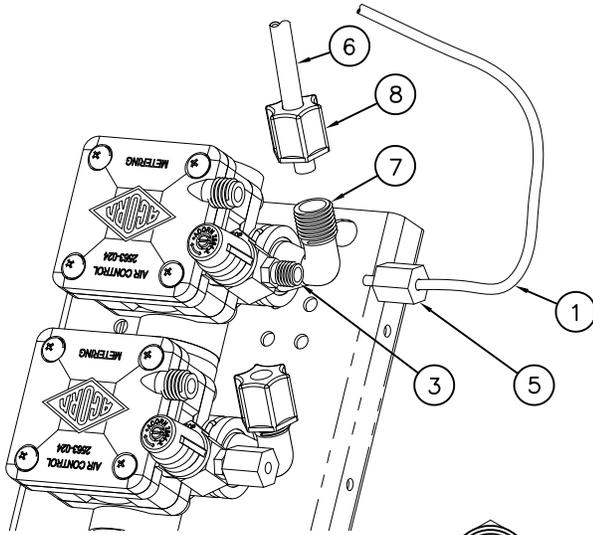
DETAIL "B"



DETAIL "C"



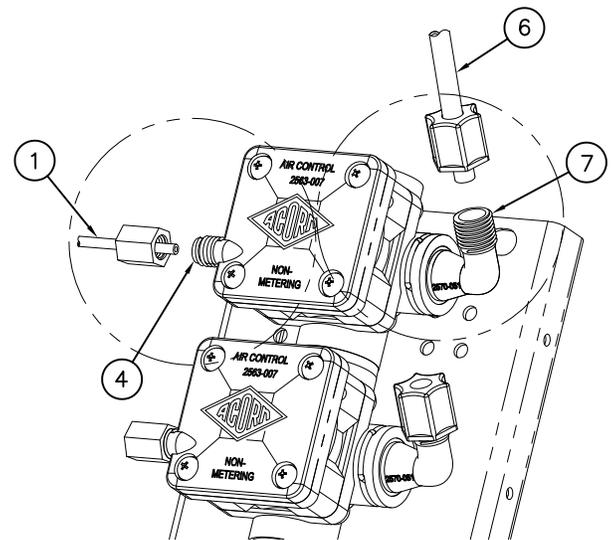
DETAIL "D"



METERING



TIMING SCREW



NON-METERING DIRECT ACTING

LAVATORY VALVES ARE FACTORY PRESET WITH A 5-20 SECOND RUN TIME. THIS WILL PROVIDE LESS THAN 1/4 GALLON (1 LITER) PER CYCLE. IF IT IS NOTED THAT VALVES ARE RUNNING LONGER THAN THIS MAXIMUM RECOMMENDED CYCLE TIME PLEASE FOLLOW THESE INSTRUCTIONS TO CORRECT THE CYCLE TIME. WHEN SET, FAUCET SHOULD NOT PRODUCE MORE THAN 1/4 GALLON (1 LITER) PER CYCLE.

TIMING IS ADJUSTABLE FROM 5 TO 60 SECONDS AND IS ACCOMPLISHED BY ROTATING TIMING SCREW. TURNING THE SCREW CLOCKWISE INCREASES TIMING WHILE COUNTERCLOCKWISE DECREASES TIMING.

INSTALLATION INSTRUCTIONS:

- A- MOUNT FIXTURE IN ACCORDANCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- B- ASSEMBLE SPOUTS AND PUSHBUTTONS TO FIXTURE.
- C- CONNECT 1/8" O.D. POLYETHYLENE AIR LINE (1) TO PUSHBUTTON (2), AND VALVE TIMER ASSEMBLY (3) SEE DETAIL "A". NOTE: FOR DIRECT ACTING: ASSEMBLE TO AIR PORT (4), SEE DETAIL "B". HAND TIGHTEN FERRULE NUT (5) PROVIDED.
- D- CONNECT 1/4" O.D. POLYETHYLENE WATER LINES (6) TO VALVE ASSEMBLY ELBOW (7) SEE DETAILS "C", AND "D". HAND TIGHTEN FERRULE NUT (8) PROVIDED.
- E- AFTER THOROUGHLY FLUSHING SUPPLY LINES MAKE UP CONNECTIONS TO VALVE ASSEMBLY INLET(S) 1/2" NPT OR 1/2" NPS FLEX HOSE AS REQUIRED.

REFERENCE DRAWINGS	
ASSEMBLIES	DRAWING
VALVE BODY	9955-006-003
CHECKSTOP	9956-040-003
FIXTURE TRIM	9957-051-001
FIXTURE TRIM -DMS	9957-055-001
AIR-CONTROL SERVOMOTORS	
METERING	9955-000-003
NON-METERING	9955-001-003

NOTE:

- 1) ALL TUBING SHOULD BE CUT SQUARE AND BE FREE OF BURRS OR DEFORMITIES TO ENSURE A WATER TIGHT CONNECTION.
- 2) EXTEND TUBING AT LEAST 1/4" BEYOND FERRULE NUT BEFORE INSERTING TUBING INTO CONNECTION OPENING BEFORE TIGHTENING.
- 3) TUBING SHOULD BE FREE OF KINKS FOR PROPER OPERATION
- 4) MAXIMUM RECOMMENDED WORKING WATER PRESSURE IS 100 PSI; TEMPERATURE IS 130° F; OUTLET TEMPERATURE IS RECOMMENDED AT A MAXIMUM OF 105° F.

WARNING:

PRIOR TO MAKING INSTALLATION, SUPPLY LINES MUST BE FLUSHED OF ALL FOREIGN MATERIAL SUCH AS PIPE DOPE, CHIPS, SOLDER, ETC. VALVE MUST BE DRAINED PRIOR TO BEING SUBJECTED TO FREEZING TEMPERATURES. MAXIMUM RECOMMENDED OUTLET WATER TEMPERATURE IS 105° F.

<p>MORRIS GROUP INTL P.O. BOX 3527 Industry, CA 91744 MORRIS GROUP 15125 Proctor Ave Industry, CA 91746 INTERNATIONAL (626) 336-4561 FAX (626) 961-2200</p>	TITLE HAND OPERATED, LAVATORY AIR-CONTROL VALVE CONNECTIONS		
	MANUFACTURE DATE JANUARY 1999 TO PRESENT	DATE ISSUED 04/22/10	DRAWING NUMBER 9905-006-001
		DATE REVISED 11/18/15	